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THE EVOLUTION OF THE
AFRICAN RURAL EMPLOYMENT RESEARCH NETWORK

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BACKGROUND

The African Bureau of AID/Washington requested Carl K. Eicher to undertake a small summer research project in 1969 on the nature, dimensions and causes of unemployment and underemployment in Africa with emphasis on the agricultural sector. An AID contract allowed Carl Eicher and three graduate students to prepare a survey report which was published in 1970 as:

Carl Eicher, Thomas Zalla, James Kocher and Fred Winch,
Employment Generation in African Agriculture, Research
Report No. 9, Institute of International Agriculture,
Michigan State University, East Lansing, Michigan,
July 1970.

Six thousand copies of this publication have been distributed; also, 1,000 copies of a French translation were published for distribution in Franco-phone Africa and 10,000 copies of a Spanish translation were published and distributed in Latin America by AID.

The African Rural Employment Research Network was initiated in 1971 through a planning Contract (AID/csd 3606) which enabled a group of African and Michigan State University (MSU) scholars to jointly develop a three-year proposal for research on rural employment. This research has subsequently been funded under the present contract (AID/csd 3625) with Michigan State University beginning on June 30, 1972. Michigan State University has since developed subcontracts with scholars in Nigeria, Sierra Leone and Ethiopia to enable local scholars to undertake research in cooperation with MSU.

PROBLEM DEFINITION, OBJECTIVES
AND THE NETWORK APPROACH

The Employment Problem

A major premise of the research is that employment and unemployment cannot be studied in isolation from overall growth, development and structural change in the economy. The employment problem as broadly defined in our study has at least three dimensions. First is the efficiency dimension resulting from underutilization of labor. Although rural labor is generally fully utilized at certain seasons in Africa there appears to be a considerable slack at other seasons. Since labor is the major factor of production in rural areas, the total production system must therefore be considered. Second is the equity dimension which arises from the importance that labor remuneration assumes as a determinant of income distribution. Finally there is the socio-political dimension arising out of overt unemployment, particularly of school-leavers. Although overt unemployment is overwhelmingly concentrated in urban areas, the problem has its roots in rural areas since a large majority are rural-urban migrants. Hence rural-urban migration must be considered an integral part of the employment problem.

Given this broad conception of the employment problem, any comprehensive evaluation of development strategies as they affect rural employment must consider a complex of interactions affecting supply and demand for labor in rural areas and its migration to urban areas. The analytical framework and methodology that underlie the research have been developed to explicitly consider major interactions in rural areas between agriculture and rural small-scale industries and migration. In Sierra Leone

where policy evaluation will be undertaken at the national level, the research is also designed to consider interactions between the rural and urban sectors in a general equilibrium framework. This emphasis on intra-sectoral and inter-sectoral relationships as they affect employment will add strength to policy recommendations that are lacking in comprehensive country studies of employment, such as the I.L.O. studies in Colombia, Sri Lanka, Kenya and Iran.

A major contribution of the Network to the study of employment problems will be to base policy recommendations on a comprehensive set of primary data generated in rural areas. Almost all country studies of employment have depended largely on secondary data in rural areas which are generally spotty in coverage and of poor quality. To our knowledge, this is the first research effort in Africa to generate data on farm and non-farm economic activities in rural areas at weekly or less intervals over a complete cropping year (12 months).

Furthermore, the data collection is integrated so that studies of agricultural production, rural nonfarm activities, migration and household consumption will be collected in the same villages and as far as possible in the same households. This integrated data collection approach should have widespread relevance to micro-level approaches to rural employment and development both in providing greater insights into the operation of the rural economy and in producing economies of scale in data collection.

Objectives of the Research Contract^{1/}

General Objectives

By bringing together selected African and U.S. colleagues in workshops and seminars on conceptual and methodological issues to facilitate development of an information system and to coordinate the training component of this project, the contractor (MSU) shall:

- (1) Conduct micro-studies of the economic viability of labor-for-capital substitution in production and marketing of selected high priority food crops.
- (2) Identify rural labor supply and characteristics of migration.
- (3) Evaluate rural employment policies related to national goals in a partial equilibrium framework involving regional demand and supply projections.
- (4) Provide necessary empirical evidence for more substantive sector analyses through the systematic application of a simulation approach, alternative input/output or other programming approaches.

Specific Objectives

The contractor shall:

- (1) Develop and refine a conceptual framework and work plan for analyzing the employment problems and policies of developing countries at both the micro and macro-economic level and

^{1/}From pages S-2 and S-3 of contract AID/csd 3625.

incorporating the employment component into project, sub-sector, and sector analysis in developing countries, with emphasis on tropical Africa, as represented by Ethiopia, Nigeria, and Sierra Leone. Other African countries may be included as mutually agreed.

- (2) Conduct rural employment studies which will include, but not be limited to:
 - (a) Demand for labor in agricultural production systems,
 - (b) Demand for labor in off-farm rural activities,
 - (c) Determinants of out-migration.
- (3) Evaluate the effects of micro and macro agricultural policies on rural employment and income and develop general policy guidelines for the Ministries of Agriculture and Planning in dealing with the employment problem in tropical Africa.
- (4) Provide an improved theoretical and quantified basis for incorporating labor into sectoral and macro-planning models.
- (5) Formulate specific agricultural policy guidelines to deal with employment problems in selected African countries.
- (6) Stimulate the development of a community of African scholars through a network which will link them with each other and with worldwide scholars engaged in employment research by, but not limited to:
 - (a) Seminars and workshops,
 - (b) Stimulating interchange between scholars,
 - (c) Promoting joint and complementary research efforts,

Evolution of the African Rural Employment Research Network

In 1971-72 a group of African and Michigan State University Scholars formed a research network and jointly developed a proposal to study problems of rural employment in Africa. The Research Network is a collaborative research and information system which brings together U.S. and African scholars for the purpose of developing and carrying out comparative research on a common problem--employment. We shall briefly review the evolution of the Research Network over the 1971-74 period.^{1/}

In most African countries, except Nigeria, agricultural economists are few in number, isolated, and sometimes find it difficult to keep abreast of ongoing research both within Africa and overseas. Typically there is one university per country and approximately two to four local agricultural economists at the Ph.D. level and ten to twenty with Master's degrees.^{2/} Agricultural economists in the universities are largely engaged in teaching. Two universities have, however, recently introduced graduate programs. The University of Ibadan in Nigeria introduced a

^{1/}The Network is utilized to develop the methodology and primary data collection called for in the specific objectives 1-5 in AID/csd 3625, as well as contributing to objective 6 which requires the contractor to, "...stimulate the development of a community of African scholars through a network which will link them with each other and with worldwide scholars engaged in employment research by, but not limited to: (a) seminars and workshops, (b) simulating interchange between scholars and (c) promoting joint and complementary research efforts."

^{2/}For example, there is one local Ph.D. in agricultural economics in the Republic of Zaire, one in Sierra Leone, four in Ethiopia, one in Kenya and none in Tanzania. In Nigeria, on the other hand, there are four departments of agricultural economics in six universities and about 15 Nigerians with Ph.D.'s in agricultural economics.

Master's degree in 1970,^{1/} while Makerere University in Uganda introduced a Master's degree in 1971. This discussion underscores the need to expand the supply of African agricultural economists and to develop mechanisms whereby Africans gain first-hand experience in designing and carrying out agricultural economic research in Africa. These objectives are included in the MSU subcontracts in Sierra Leone, Nigeria and Ethiopia under Contract AID/csd 3625.

Country Research Under African Leadership

The Network utilizes subcontracts with African scholars to carry out the research in cooperation with U.S. scholars. The research in Sierra Leone is being directed by Dr. Dunstan S. C. Spencer, a Sierra Leonean agricultural economist at Njala University College, University of Sierra Leone, under a subcontract with Michigan State University.^{2/} In Nigeria research is being carried out under the leadership of Professor S. O. Olayide, Department of Agricultural Economics, University of Ibadan, through a subcontract with Michigan State and a \$60,000 grant from the Rockefeller Foundation.

In Ethiopia, a five-year research program on small farmers will be carried out in the Ada District of Ethiopia through a subcontract with the Institute of Development Research (IDR), Haile Sellassie I University,

^{1/} Currently there are six Master's degree students in residence in agricultural economics at Ibadan: five are Nigerian and one is from the Cameroons.

^{2/} Njala University College has received grants from the Rockefeller Foundation (\$16,000) and the Population Council (\$15,250) to underwrite part of the cost of Njala's Rural Employment Study.

but with MSU providing leadership for the first two to three years of the five-year project.

Annual Conferences

Annual conferences of Network researchers are an important component of the Network's information system. The main purpose of the annual conference is to discuss research methodology, preliminary research findings, and develop plans of work for the coming year. The conferences normally include 18-24 Network researchers, plus representatives from several donor agencies, foundations and scholars from other regions.^{1/} To date, conferences have been held in Ibadan, Nigeria in December, 1971; in Bellagio, Italy in October, 1972; and in Njala, Sierra Leone in November, 1973. A conference is scheduled in Ethiopia in October, 1974 and a final conference will be convened in East Lansing, Michigan in June, 1976.^{2/}

^{1/} For example, at the 1973 conference in Sierra Leone, Mahar Mangahas, of the Philippines, reported on employment and income distribution in the Philippines. Abraham Weisblat of the Agricultural Development Council reported on research in India and Lehman Feltcher of AID/Washington reported on his recent research on employment and income distribution in Latin America.

^{2/} The final conference will tentatively include ten Network researchers, ten government leaders and civil servants and ten representatives of donor agencies and related research teams which have been focusing on employment and income distribution research in Asia and Latin America.

Inter-Regional Linkages

Efforts are being made to facilitate an intellectual exchange among Network researchers in Africa. A Sierra Leonean--Dr. Dunstan Spencer--has been engaged as a consultant to the Ada research project in Ethiopia. Spencer has been able to draw on his seven years of research experience in Sierra Leone in his recommendations for the design of the Ada research, as well as gain first-hand information on Ethiopia that can be incorporated into his research and teaching in Sierra Leone.

The Network is attempting to facilitate scholarly exchanges with researchers in other African countries, Asia and Latin America who are working on similar problems. Network researchers--David Norman of Nigeria and Eric Tollens of Zaire--were recently invited to participate in an Agricultural Development Council/CIMMYT sponsored meeting in Singapore on methodology for primary data collection for small farmers. Tollens, Spencer, and Norman will be invited to participate in a follow-up ADC/CIMMYT sponsored seminar on primary data collection which will be held in 1974 or 1975.

Dr. Hartwig de Haen of the University of Bonn will spend July in Sierra Leone as a consultant on the macro modeling of the Sierra Leonean study. de Haen has served as a consultant to MSU's Korean Agricultural Simulation Project over the past two years. Carl Liedholm will spend four months of the 1974-75 academic year interacting with scholars engaged in employment research at the Economic Growth Center, Yale University and at the Institute of Development Studies, Sussex University. Furthermore, a number of Network researchers have given seminars on the research program and findings to scholars working on related problems in the World Bank, FAO and the ILO.

Inter-University Cooperation in Facilitating Ph.D. Dissertation
Research in Africa

The Network has encouraged African graduate students in United States' universities to return to Sierra Leone, Nigeria and Ethiopia to collect data for their dissertations as members of research teams in these countries. For example, a Sierra Leonean graduate student at Ohio State-- Joseph Tommy--and a Nigerian graduate student at MSU--Enyinna Chuta--will collect data for their Ph.D. dissertations in Sierra Leone as members of the Sierra Leone research team. Also arrangements are being made for an Ethiopian Ph.D. candidate in agricultural economics at Wisconsin--Ato Gebremicael--to return to Ethiopia in December, 1974 for 12 months to collect data for his dissertation as a member of the MSU/IDR research team.

Three Cornell Ph.D. candidates in agricultural economics have visited MSU to discuss their ongoing and projected dissertation research. Peter Matlon spent the summer of 1973 at MSU developing his Ph.D. dissertation proposal on employment and income distribution in groundnut production in Nigeria. Matlon arrived in Nigeria in late 1973 and is working informally with a Network researcher--Dr. David Norman--of Ahmadu Bello University for 18 months. Mr. James Akinwumi, a Nigerian agricultural economist, also visited MSU in 1973 to utilize the African Rural Employment Library and discuss his projected dissertation research in Nigeria. An Ethiopian agricultural economist--Tesfai Teclé--visited MSU to review the results of his dissertation research on Rural Development Programs in Ethiopia and to discuss his projected research in Ethiopia. Dr. Tesfai recently joined the Institute for Development Research, Haile Sellassie I University in Ethiopia; he will be a member of the IDR/MSU research team. The IDR/MSU

research program will also encourage Ethiopians to pursue graduate training in the United States. Ato Girma Begashaw of HSIU has received an AID scholarship which will enable him to begin his Ph.D. program at MSU in the fall of 1974. It is anticipated that at least one more Ethiopian agricultural economist from HSIU will be enrolled in a graduate school in the U.S. in the fall of 1974 followed by one to two more students per year over the next two to three years.

Network Library

The African Rural Employment Network has developed a small but highly useful library of approximately 2,800 articles, papers and unpublished conference proceedings. The Network library is located in the Department of Agricultural Economics at MSU. The Network librarian sends two copies of each monthly acquisition list (see Appendix) to all Network researchers; the Network Library supplies copies of the publications requested by Network researchers in the field. The provision of free copies of library materials to Network researchers substantially speeds up the flow of information since conference papers and working papers are often published after a time lag of one or two years. It also reduces the isolation of African scholars with limited library materials.

Publications

The Network is committed to the rapid dissemination of research results through its African Rural Employment Papers. Papers are automatically sent to every African university library, Department of Economics and

Agricultural Economics and Social Science Research Institute in Africa and to institutions and scholars in 70 countries. The mailing list currently totals 1,100.

To date ten African Rural Employment Papers have been published and a total of nine to ten additional papers will be published in 1974 and 1975. All African Rural Employment Papers are subjected to both internal and external reviews prior to publishing. If funds can be secured from other sources, it is proposed to translate all African Rural Employment Papers into French for free distribution in French-speaking countries in Africa.

The African Rural Employment Papers (AREP's) are distributed without charge to libraries, institutions, government agencies and officers, and scholars (approximately 50 percent of the papers are distributed within the United States and 50 percent outside the United States). Ten papers have been published at an average printing cost of 80 cents per Paper. The total number of Papers distributed as of October 1974 are as follows:

<u>AREP No.</u>	<u>Number Distributed</u>
1	2,392
2	1,863
3	1,683
4	1,506
5	1,675
6	1,634
7	1,573
8	1,741
9	1,599
10	1,500
Total	<u>17,166</u>

Duplicate copies of each paper are mailed as follows: 50 copies to the Agency for International Development in Washington, D.C. to be distributed to all US/AID Missions; 20 copies to the Center for Research on Economic Development at the University of Michigan to be distributed to their personnel; 145 copies to the Library of Congress in Washington, D.C. for distribution to U.S. libraries and 20 copies to FAO, Rome.

In addition to the African Rural Employment Papers, a new series of Working Papers is being launched in 1974 to report new ideas, preliminary research findings, research plans, etc. These papers will be largely for internal circulation among Network researchers.

The Network Approach to Date

Although the Network has taken about one year to develop a research proposal and one year to develop subcontracts for field research, the Network has demonstrated that it can:

- (a) encourage local scholars to develop the organizational and administrative capacity to provide research leadership through subcontracts,
- (b) contribute to the development of improved methodology which transcends national boundaries,
- (c) guide agricultural economics graduate students in American universities to Ph.D. dissertation research on current problems in selected African countries,
- (d) speed up the flow of library materials to researchers in Africa,
- (e) stimulate an intellectual exchange among researchers in other regions of the world who are focusing on similar problems,

- (f) encourage the financing of research on employment problems in Africa by other donors such as the Rockefeller Foundation, the Population Council, etc.

The Network is an approach to organizing research which both U.S. and African scholars have found to be of mutual benefit. However, it is a time consuming process and obviously is only one of many alternative methods of organizing research. For example, it will take four years to complete the research program under AID/csd 3625, rather than three years as originally planned.

APPENDIX A

NETWORK RESEARCHERS: NAMES, NATIONALITIES AND
INSTITUTIONAL AFFILIATIONS

1. Assefa Mehretu (Ethiopian), Director, Institute for Development Research, Haile Sellassie I University, Addis Ababa, Ethiopia.
2. Derek Byerlee (Australian), Assistant Professor, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan and Research Fellow, Department of Agricultural Economics, Njala University College, Njala, Sierra Leone.
3. Enyinna J. Chuta (Nigerian), Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan and Research Fellow, Department of Agricultural Economics, Njala University College, Njala, Sierra Leone.
4. Carl K. Eicher (American), Professor, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.
5. Sunday Essang (Nigerian), Lecturer, Department of Agricultural Economics, University of Ibadan, Ibadan, Nigeria.
6. Habib Fatooh (Tanzanian), Graduate Research Assistant and Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.
7. John Flinn (Australian), Economist, International Institute of Topical Agriculture, Ibadan, Nigeria.
8. John Hanson (American), Professor, Department of Secondary Education and Curriculum and Professor, African Studies Center, Michigan State University, East Lansing, Michigan.
9. Kifle Negash (Ethiopian), Department of Agricultural Economics and Business, Haile Sellassie I University, Dire Dawa, Ethiopia.
10. Carl Liedholm (American), Professor, Department of Economics, Michigan State University, East Lansing, Michigan.
11. Dean Linsenmeyer (American), Graduate Research Assistant and Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan and recipient of Foreign Area Fellowship for research in Zaire, 1974-75.
12. Adewale F. Mabawonku (Nigerian), Graduate Research Assistant and Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.

13. Peter Matlon (American), Ph.D. Candidate, Department of Agricultural Economics, Cornell University, Ithaca, New York and Research Associate, Nigerian Institute of Social and Economic Research, University of Ibadan, Ibadan, Nigeria.
14. I. I. May-Parker (Sierra Leonean), Lecturer, Department of Agricultural Economics, Njala University College, Njala, Sierra Leone.
15. John Nabila (Ghanian), Ph.D. Candidate, Department of Geography, Michigan State University, East Lansing, Michigan and Department of Geography, University of Ghana, Accra, Ghana.
16. David Norman (British), Head, Rural Economy Research Unit, Ahmadu Bello University, Zaria, Nigeria.
17. O. Ogunfowora (Nigerian), Senior Lecturer, Department of Agricultural Economics, University of Ibadan, Ibadan, Nigeria.
18. S. O. Olayide (Nigerian), Professor and Chairman, Department of Agricultural Economics, University of Ibadan, Ibadan, Nigeria.
19. Merritt Sargent (American), Graduate Research Assistant and Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.
20. James Shaffer (American), Professor, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.
21. John Shields (American), Graduate Research Assistant and Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.
22. Vernon Sorenson (American), Professor, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.
23. Dunstan S. C. Spencer (Sierra Leonean), Lecturer, Department of Agricultural Economics, Njala University College, Njala, Sierra Leone.
24. Tesfai Teclé (Ethiopian), Research Fellow, Institute for Development Research, Haile Sellassie I University, Addis Ababa, Ethiopia.
25. Eric Tollens (Belgian), Acting Head, Department of Rural Economics, National University of Zaire, Kisangani Campus, Kisangani, Republic of Zaire and Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.
26. Joseph Tommy (Sierra Leonean), Ph.D. Candidate, Department of Agricultural Economics and Rural Sociology, Ohio State University, Columbus, Ohio and Research Fellow, Department of Agricultural Economics, Njala University College, Njala, Sierra Leone (effective July 1, 1974).

27. William Ward (American), Associate Professor, Department of Business and Economics, University of North Carolina, Wilmington, North Carolina.
28. Fred Winch (American), Ministry of Agriculture, Tamale, Ghana and Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.
29. Thomas Zalla (American), Ph.D. Candidate, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan and Economic Research Bureau, University of Dar es Salaam, Dar es Salaam, Tanzania.

APPENDIX B

PUBLICATIONS OF THE AFRICAN RURAL EMPLOYMENT RESEARCH NETWORK

African Rural Employment Papers^{1/}

- Derek Byerlee and Carl K. Eicher, "Rural Employment, Migration and Economic Development: Theoretical Issues and Empirical Evidence from Africa, AREP No. 1, 1972.
- Derek Byerlee, "Research on Migration in Africa: Past, Present and Future," AREP No. 2, 1972.
- Dunstan S. C. Spencer, "Micro-Level Farm Management and Production Economics Research Among Traditional African Farmers: Lessons from Sierra Leone," AREP No. 3, 1972.
- D. W. Norman, "Economic Analysis of Agricultural Production and Labour Utilization Among the Hausa in the North of Nigeria," AREP No. 4, 1973.
- Carl Liedholm, "Research on Employment in the Rural Nonfarm Sector in Africa," AREP No. 5, 1973.
- Gordon Gemmill and Carl K. Eicher, "A Framework for Research on the Economics of Farm Mechanization in Developing Countries," AREP No. 6, 1973.
- Francis Sulemanu Idachaba, "The Effects of Taxes and Subsidies on Land and Labour Utilization in Nigerian Agriculture," AREP No. 7, 1973.
- D. W. Norman, "Methodology and Problems of Farm Management Investigations: Experiences from Northern Nigeria," AREP No. 8, 1973.
- Derek Byerlee, "Indirect Employment and Income Distribution Effects of Agricultural Development Strategies: A Simulation Approach Applied to Nigeria," AREP No. 9, 1973.
- Sunday M. Essang and Adewale F. Mabawonku, "Determinants and Impact of Rural-Urban Migration: A Case Study of Selected Communities in Western Nigeria," AREP No. 10, 1974.

^{1/}Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.

Working Papers

- African Rural Employment Research Network, "African Rural Employment Study: Progress Report and Plan of Work, 1972-76," Working Paper No. 1, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan, May 1974.
- Dean Linsenmeyer, "An Economic Analysis of Maize Production in the Kasai Oriental Region of Zaire: A Research Proposal," Working Paper No. 2, African Rural Employment Research Network, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan, May 1974.

Other Published Papers

- Derek Byerlee, "Rural-Urban Migration in Africa: Theory, Policy and Research Implications," International Migration Review, Vol. 8, No. 4, Winter 1974.
- Derek Byerlee and Carl K. Eicher, "Rural Employment, Migration and Economic Development: Theoretical Issues and Empirical Evidence from Africa," Agriculture in the Development of Low Income Nations, edited by Nural Islam. London: Macmillan and St. Martin's Press, 1973 (from African Rural Employment Paper No. 1).
- Derek Byerlee and A. N. Halter, "A Macro-Economic Model for Agricultural Sector Analysis," American Journal of Agricultural Economics, forthcoming May, 1974 (from African Rural Employment Paper No. 9).
- Carl K. Eicher, "Economic Planning and Employment Issues," proceedings of Economic Development Conference, Virginia State College, Petersburg, Virginia, April 19, 1973.
- Sunday M. Essang and Adewale Mabawonku, "Determinants of the Rate of Rural-Urban Migration in Selected Rural Communities of Western Nigeria," West Africa Journal of Agricultural Economics, forthcoming, Vol. 2, 1973 (from African Rural Employment Paper No. 10).
- Gordon Gemmill and Carl K. Eicher, "The Economics of Farm Mechanization and Processing in Developing Countries," Research and Training Network Seminar Report, Agricultural Development Council, Inc., New York, 1973 (from African Rural Employment Paper No. 6).
- Dunstan S. C. Spencer, "Agriculture and the Problem of Urban Unemployment in Sierra Leone," Sierra Leone Agricultural Journal, 9: 1 (February, 1972).

Rural Development Papers (RDP): University of Ibadan,
Ibadan, Nigeria

- S. M. Essang. "Agricultural Development and Employment Generation in Nigeria: The Impact of Public Policies," RDP No. 2, June 1972.
- _____. "Labour Absorption in Large-Scale Agriculture: Theory and Empirical Evidence from Ghana," RDP No. 4, September 1972.
- _____ and Adewale F. Mabawonku. "Determinants and Impact of Rural-Urban Migration on Selected Communities in Western Nigeria," RDP No. 10, December 1973.
- Francis S. Idachaba, "The Effects of Taxes on Marketing Board Crops and Subsidies on Inputs on Labour Absorption in Nigerian Agriculture," RDP No. 5, September 1972.
- _____. "Policy Distortions, Subsidies and Rural Employment Generation: A Second-Best Approach," RDP No. 11, December 1973.
- O. Ogunfowora. "Income and Employment Potential of Credit and Technology in Peasant Farming," RDP No. 9, December 1973.
- _____. "Methodological Approach for Derived Resource Demand and Product Supply Analysis from Sample Surveys of Rural Farm Families in Nigeria," RDP No. 7.
- _____, S. M. Essang and S. O. Olayide. "Towards a Workable Farm Credit System in Nigeria: Training Programme for Rural Credit Staff," RDP No. 6, October 1972.
- S. O. Olayide, "The Methodology for Studying Labour Absorption in the Derived Savannah Zone of Nigeria," RDP No. 3, June 1972.
- _____. "Research on Rural Integrated Development, Employment and Food Production in the Guinea Savannah Zone of Nigeria," RDP No. 1, June 1972.

Other Conference Papers, Draft Papers
and Consultant Reports

- Derek Byerlee. "Human Resources in Rural Development: Some Theoretical Issues," paper presented for A/D/C Conference on Human Resource Investments in Rural Development, Vanderbilt University, Nashville, Tennessee, May 18-19, 1973.
- Enyinna J. Chuta. "A Research Proposal to Study Small-Scale Industries in Rural Areas of Sierra Leone," prepared for the African Rural Employment Research Network Conference, Njala University College, Njala, Sierra Leone, November-December, 1973.
- Peter Matlon. "The Determinants of Labor's Off-Farm Supply Price: A Micro-Theoretic Approach," draft paper.
- I. I. May-Parker. "Problems of Rice Marketing in Sierra Leone," prepared for the African Rural Employment Research Network Conference, Njala University College, Njala, Sierra Leone, November-December, 1973.
- Marjorie J. Mbilinyi. "Attitudes, Expectations and the Decision to Educate in Rural Tanzania," draft paper.
- Dunstan S. C. Spencer. "Making Optimum Use of National Resources--The Case of the Drive for Self Sufficiency in Rice Production in Sierra Leone," prepared for the African Rural Employment Research Network Conference, Njala University College, Njala, Sierra Leone, November-December, 1973.
- _____. "Proposed Five-Year Evaluation of the Socio-Economic Impact of the ADA District Development Project (ADDP) in Ethiopia," consultant's report.
- C. Peter Timmer. "The Economics of Marketing and Processing in Sierra Leone," consultant's report.
- Joseph Tommy. "Research Outline on Determinants of Migration in Sierra Leone," prepared for African Rural Employment Research Network Conference, Njala University College, Njala, Sierra Leone, November-December, 1973.
- William A. Ward. "Incorporating Employment and Income Distribution Objectives into Agricultural Project Appraisal," draft paper.

APPENDIX C

ACQUISITION LIST NO. 22

AFRICAN RURAL EMPLOYMENT LIBRARY

AFRICAN RURAL EMPLOYMENT NETWORK
DEPARTMENT OF AGRICULTURAL ECONOMICS
MICHIGAN STATE UNIVERSITY
EAST LANSING, MICHIGAN 48824

APRIL 1, 1974

BOOKS AND MONOGRAPHS

African Bibliographic Center. "Economic Cooperation and Regional Integration in Africa." African Bibliographic Center, Vol. 10, No. 6, Washington, D.C., 1973, 49 pages.

_____. "Educational Development in Africa." African Bibliographic Center, Vol. 10, No. 2, Washington, D.C., 1973, 93 pages.

_____. "Implementation and Administration of Development Activities in Africa." African Bibliographic Center, Vol. 10, No. 8, Washington, D.C., 1973, 68 pages.

_____. "Income and Employment Generation in Africa." African Bibliographic Center, Vol. 10, No. 5, Washington, D. C., 1973, 73 pages.

_____. "Population Problems in Africa." African Bibliographic Center, Vol. 10, No. 2, Washington, D.C., 1973, 71 pages.

Agency for International Development. "A.I.D. Research 1971-1973." Agency for International Development, Washington, D.C., December 1973, 97 pages.

Baster, Nancy. "Distribution of Income and Economic Growth: Concepts and Issues," Report on an Institute Study, United Nations Research Institute for Social Development (UNRISD), Geneva, Switzerland, 1970, 80 pages.

Bates, Robert H. "The Policy Origins of Migration in Zambia." Social Science Working Paper No. 29, Division of the Humanities and Social Sciences, California Institute of Technology, Pasadena, California, August 1973, 74 pages.

Berry, R. Albert. "Urban Labour Surplus and the Commerce Sector: Colombia." Center Discussion Paper No. 178, Economic Growth Center, Yale University, New Haven, Connecticut, June 1973, 100+ pages.

Brainard, Joel P. "Report on a Preliminary Linear Programming Analysis of Colombia." Analytical Working Document No. 15, Sector Analysis Division, Bureau for Latin America, Agency for International Development, Washington, D.C., January 1974, 50+ pages.

Conde, Julien. "The Demographic Transition as Applied to Tropical Africa." Development Centre, Organisation for Economic Co-operation and Development, August 1971, 207 pages in main text and 164 pages in Annex: Statistical Tables.

Due, Jean M. "Changes in Incomes and Imports of Consumer Goods in Sierra Leone," Agricultural Experiment Station Bulletin 719, University of Illinois, Urbana, Illinois, August 1966, 63 pages.

Erbes, Robert. "International Tourism and the Economy of Developing Countries," Organisation for Economic Co-operation and Development, Development Centre, Paris, June 1973, 146 pages.

Ferguson, Donald S. "The Nigerian Beef Industry." Cornell International Agricultural Bulletin No. 9, Cornell University, Ithaca, New York, August 1967, 86 pages.

Gutkind, Peter C. W. "Unemployment in Africa," Bibliography Series No. 1, Centre for Developing Area Studies, McGill University, Montreal, Quebec, Canada, December 1972, 62 pages.

Hanson, John W. "Imagination and Hallucination in African Education." Institute for International Studies, College of Education, Michigan State University, East Lansing, Michigan, no date cited, 55 pages.

Heady, Earl O. and Steven T. Sonka. "Income and Employment Generation in Rural Areas in Relation to Alternative Farm Programs." North Central Regional Center for Rural Development, Iowa State University, Ames, Iowa, December 1973, 153 pages.

International Bank for Reconstruction and Development, "Employment in Trinidad and Tobago." World Bank, Washington, D.C., March 1973, 300+ pages.

International Labour Office. "Towards Full Employment--A Programme for Colombia." International Labour Office, Geneva, Switzerland, 1970, 471 pages.

International Labour Organization. "World Employment Programme--A Progress Report on Its Research Oriented Activities." International Labour Organization, Geneva, Switzerland, December 1973, 132 pages.

Kunreuther, Howard. "Risk-Taking and Farmers' Crop Growing Decisions." Report 7219, Center for Mathematical Studies in Business and Economics, University of Chicago, Chicago, Illinois, May 1972, 50+ pages.

Lambert, Richard D. "Language and Area Studies Review." Monograph 17 of the American Academy of Political and Social Science, Sponsored by the Social Science Research Council, Philadelphia, Pennsylvania, October 1973, 490 pages.

Mabagunje, Akin L. "Growth Poles and Growth Centres in the Regional Development of Nigeria." Report No. 71.3, United Nations Research Institute for Social Development (UNRISD), Geneva, Switzerland, 1971, 83 pages.

Manig, Winfried. "Marketing of Selected Agricultural Commodities in the Baco Area, Ethiopia," Occasional Paper No. 66, Employment and Income Distribution Project, Cornell University, Ithaca, New York, December 1973, 79 pages.

Moock, Peter Russell, "Managerial Ability in Small-Farm Production: An Analysis of Maize Yields in the Vihga Division of Kenya." Ph.D. Dissertation, Columbia University, 1973, 336 pages.

Nigeria, Federal Republic of. "Guidelines for the Third National Development Plan 1975-1980." The Central Planning Office, Federal Ministry of Economic Development and Reconstruction, Lagos, Nigeria, 1973, 61 pages.

Organisation for Economic Co-operation and Development. "Development Problems." Summaries of the papers presented by the Tanzanian Ministries and the O.E.C.D. Development Centre Experts at the Dar es Salaam Seminar, January 1970 (O.E.C.D.,

- Development Centre, Paris, 1970, 184 pages.
- Organisation for Economic Co-operation and Development. "Human Resources and Development Planning in Africa." Proceedings of an Expert Group Meeting held at African Institute for Economic Development and Planning (I.D.E.P.), Dakar, Senegal, February 26-March 1, 1973, 65 pages.
- Paukert, Felix and Michael Farbman. "Research and Action Programme Concerning Income Distribution and Employment." Bibliography on Income Distribution, World Employment Programme, International Labour Office, Geneva, Switzerland, September 1973, 48 pages.
- Poleman, Thomas T. "The Food Economies of Urban Middle Africa: The Case of Ghana." Food Research Institute Studies, Vol. II, No. 2, May 1961, pp. 121-174.
- Roumasset, James Allan. "Risk and Choice of Techniques for Peasant Agriculture: The Case of Philippine Rice Farmers." Ph.D. Dissertation, University of Wisconsin, 1973, 184 pages.
- Steel, William F. and S. J. Mabey. "Unemployment and Income in Ghana Since 1960." Bibliography Series No. 4 (an annotated bibliography), Centre for Developing Area Studies, McGill University, Montreal, Quebec, Canada, August 1973, 75 pages.
- Suttor, Richard E. "Adjustments in Agricultural Production to Attain Minimum Nutritional Requirements Consistent with Consumer Incomes." Analytical Working Document #16, Sector Analysis Division, Bureau for Latin America, Agency for International Development, Washington, D.C., February 1974, 93 pages.
- Suttor, Richard E., James L. Doster and Susanne Bacon. "Analysis of the Impact of Land, Capital and Family Labor on Small Farms." Analytical Working Document #13, Sector Analysis Division, Bureau for Latin America, Agency for International Development, Washington, D.C., September 1973, 55 pages.
- Tietze, Christopher and Deborah A. Dawson. "Induced Abortion: A Factbook." Reports on Population/Family Planning, No. 14, Population Council, New York, December 1973, 56 pages.
- van Haeften, R. K. "Export Markets for Colombian Agricultural Products." Analytical Working Document #5, Sector Analysis Division, Bureau for Latin America, Agency for International Development, Washington, D.C., February 1974, 56 pages.
- Wolgin, Jerome Morris. "Farmer Response to Price in Smallholder Agriculture in Kenya: An Expected Utility Model." Ph.D. Dissertation, Yale University, 1973, 125 pages.

GENERAL

- Agarwala, R. and J. Drinkwater. "Consumption Functions with Shifting Parameters Due to Socio-Economic Factors." Review of Economics and Statistics, Vol. 54, February 1972, pp. 89-96.
- Fox, Karl A. "Combining Economic and Non-Economic Objectives in Development Planning: Problems of Concept and Measurement." Occasional Paper No. 1, 211-d Grant Program, Iowa State University, Ames, Iowa, November 1973, 29 pages.
- Hymer, Stephen. "Direct Foreign Investment and the National Economic Interest." Center Paper No. 108, Economic Growth Center, Yale University, New Haven, Connecticut, 1967, 12 pages.
- Idachaba, F. S. "Policy Distortions, Subsidies and Rural Employment Generation: A Second-Best Approach." Paper presented at the Secor! Annual Conference of the African Rural Employment Research Network, Njala University College, Njala, Sierra Leone, November 28-December 1, 1973, 17 pages.
- Lagoueyte, Jean-Pierre. "Vers l'Etude de la Demand Latente--Analyse de la Consommation et Methodologie Statistique." Economies et Societes, Paris, Vol. 5, October 1971, pp. 1867-1906.
- Matlon Peter. "The Definition and Measurement of Rural Disguised Unemployment in Low Income Countries--a Review of the Literature and Speculations on the Use of Energy." Cornell Agricultural Economics Staff Paper No. 72-11, Cornell University, Ithaca, New York, May 1972, 44 pages.
- Pack, Howard. "The Employment-Output Trade-off in LDC's--A Microeconomic Approach." Center Discussion Paper No. 179, Economic Growth Center, Yale University, New Haven, Connecticut, June 1973, 20 pages.
- Singer, H. W. "The Quest for an Employment Strategy in Developing Countries and Its Relationship to the Work on Human Resources Indicators." Social Science Project on Human Resources Indicators Study XXII, United Nations Educational Scientific and Cultural Organization, Methods and Analysis Unit, Department of Social Sciences, Paris, France, November 1972, 16 pages.
- Yotopoulos, Pan A. and Lawrence J. Lau. "On Modeling the Agricultural Sector in Developing Economies: An Integrated Approach of Micro and Macroeconomics." Memorandum No. 148, Discussion Paper No. 73-4, Center for Research in Economic Growth, Ford Research Institute, Stanford University, Stanford, California, June 1973, 43 pages.

WESTERN AFRICA

Nigeria

Ogunfowora, O. "Income and Employment Potential of Credit and Technology in Peasant Farming." Paper presented at the Second Annual Conference of the African Rural Employment Research Network, Njala University College, Njala, Sierra Leone, November 28-December 1, 1973, 18 pages.

Ogunfowora, Olabisi, et. al. "A Preliminary Study of Agricultural Situation in Kwara State: Summary of Situational Questionnaire on Rural Development." Paper presented at the Second Annual Conference of the African Rural Employment Research Network, Njala University College, Njala, Sierra Leone, November 28-December 1, 1973, 37 pages.

Rural Economy Research Unit. "Coding Manual--Consumption Survey Project." Rural Economy Research Unit, Ahmadu Bello University, Zaria, Nigeria, April 1970-June 1971, 25+ pages.

Sierra Leone

Due, Jean M. "Changes in Imports of Capital Goods--Sierra Leone, 1950-1965." Agricultural Experiment Station Bulletin 730, University of Illinois, Urbana, Illinois, May 1968, 43 pages.

Harvey, M. E. "Economic Development and Migration in Sierra Leone." Published in Population Growth and Economic Development in Africa. London: Heinemann, 1972, pp. 167-172.

May-Parker, I. I. "Problems of Rice Marketing in Sierra Leone." Paper presented at the Second Annual African Rural Employment Research Network Conference, Njala University College, Njala, Sierra Leone, November 28-December 1, 1973, 13 pages.

EASTERN AFRICA

Bates, R. "Rural Development in Kasumpa Village, Zambia." Social Science Working Paper No. 34, Division of the Humanities and Social Sciences, California Institute of Technology, Pasadena, California, February 1974, 45 pages.

King, John. "Wages, Efficiency and Labour Market Disequilibrium: A Two Sector Approach to the Wage Policy Dilemma in Kenya." Working Paper No. 57, Institute for Development Studies, University of Nairobi, Nairobi, Kenya, August 1972, 19 pages.

Power, John H. "Tax Reform and Industrialization Policy: A Comment on Recent Development in Kenya." Discussion Paper No. 170, Institute for Development Studies, University of Nairobi, Nairobi, Kenya, 1973, 12 pages.

EASTERN AFRICA - Continued

- _____ Roling, Niels, Fred Chege and Joe Ascroft. "Rapid Development for Kenya's Small Farms." Discussion Paper No. 173, Institute for Development Studies, University of Nairobi, Nairobi, Kenya, July 1973, 12 pages.
- Singer, H. W. "Income Distribution and Population Growth." Institute of Development Studies, University of Sussex, Brighton, England, May 1973, 25 pages. (Unable to supply complimentary copy--Sussex charges for all publications.)
- _____ Tobin, James. "Estimates of Sectoral Capital/Output Ratios for Kenya." Discussion Paper #171, Institute for Development Studies, University of Nairobi, Nairobi, Kenya, 1973, 12 pages.
- _____ Vinnai, Volker. "Kenya's External Trade 1964-1971." Discussion Paper No. 165, Institute for Development Studies, University of Nairobi, Nairobi, Kenya, April 1973, 34 pages.
- _____ Von Pischke, J. D. "Bibliography of Agricultural Credit in Kenya." I.D.S. Subject Bibliography No. 1, Institute of Development Studies, University of Nairobi, Nairobi, Kenya, June 1973, 19 pages.

CENTRAL AFRICA

- De Smet, R. E. "Enquete de Fuladu, 1959: L'Emploi du Temps du Paysan Dans un Village Zande du Nord-Est du Zaïre." Mission Interdisciplinaire des Uele 1959-1961, Centre Scientifique et Medical de l'Universite Libre de Bruxelles en Afrique Centrale, Bruxelles, No. 89, 1972, 396 pages (Unable to supply complimentary copy).
- _____ Tollens, Eric F. "L'Economie de la Culture Des Fibres Textiles au Zaïre." Prepared Seminaire sur "Les Problemes de Developpement Agricole au Zaïre." Institut de Recherches Economiques et Sociales (I.R.E.S.), Kinshasa, Zaïre, March 4-8, 1974, 33 pages.

NORTHERN AFRICA

SOUTHERN AFRICA

ASIA

- Cassen, Robert. "Population, Development and the Distribution of Incomes." Institute of Development Studies Communication 107, University of Sussex, Brighton, England, October 1973, 30 pages (Unable to supply complimentary copy).
- Cooper, Richard N. "Tariffs and Smuggling in Indonesia." Center Discussion Paper No. 184, Economic Growth Center, Yale University, New Haven, Connecticut, July 1973, 16 pages.
- Dambe, Gunars and Erik Thorbecke. "Agricultural Productivity and Employment in Taiwan." Occasional Paper No. 2, 211-d Grant Program, Iowa State University, Ames, Iowa, February 1974, 20 pages.
- Farooq, Ghazi, M. and Gordon C. Winston. "Shift Working, Employment, and Economic Development: A Study of Industrial Workers in Pakistan." Center Discussion Paper No. 181, Economic Growth Center, Yale University, New Haven, Connecticut, June 1973, 34 pages.
- Khan, Akhter Hameed. "Reflections on the Comilla Rural Development Projects." OLC Paper No. 3, Overseas Liaison Committee, American Council on Education, March 1974, 46 pages.
- McGregor, Andrew. "Agricultural Labor Absorption and Its Possible Quantification in Low-Income Countries: The Fiji Case." Cornell Agricultural Economics Staff Paper No. 72-13, Cornell University, Ithaca, New York, May 1972, 28 pages.
- Mukhrjee, M. and D. S. Prasada Rao. "Non-monetized Consumption in the Analysis of Consumer Behavior." Economic Affairs, Vol. 17, No. 1-2, January/February 1972, pp. 49-64.
- Perera, L. N. et. al. "The Effect of Income on Food Habits in Ceylon-- The Findings of the Socio-Economic Survey of Ceylon, 1969/70." Marga, Vol. 2, No. 1, 1973, pp. 81-110.
- Roumasset, James. "Estimating the Risk of Fertilization: Rice Production in the Phillipines." Working Paper Series #32, Department of Economics, University of California, Davis, California, December 1973, 38 pages.
- Shortlidge, Richard L., Jr., "University Training for Gramsevaks in India, An Example of Recurrent Education in a Low Income Country." Occasional Paper No. 67, Employment and Income Distribution Project, Cornell University, Ithaca, New York, January 1974, 20 pages.

EUROPE

LATIN/SOUTH AMERICA

_____ Dambe, Gunars and Erik Thorbecke. "Agricultural Production and Employment in Colombia." Occasional Paper No. 3, 211-d Grant Program, Iowa State University, Ames, Iowa, Gebruary 1974, 29 pages.

_____ Harris, Donald J. "Econometric Analysis of Household Consumption in Jamaica." Social and Economic Studies, Vol. 13, No. 4, December 1964, pp. 471-487.

_____ House, Robert M. "Notes on Public Sector Data and Methodology." Methodological Working Document #24, Sector Analysis Division, Bureau for Latin America, Agency for International Development, Washington, D.C., December 1973, 32 pages.

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